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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/929,278	Applicant(s) BENTLEY, KEITH	
	Examiner Miranda Le	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is responsive to Amendment, filed 09/22/2005.
2. Claims 1-82 are pending in this application. Claims 1, 3, 13, 28, 39, 58, 66, 74 are independent claims. This action is made Final.
3. The rejection of claims 29, 57 by 35 U.S.C. §112 second paragraph has been withdrawn in view of the amendment.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 58, 60, 62, 66, 68, 70, 74, 76, 78 are rejected under 35 U.S.C. 102(e) as being anticipated by Crow et al. (US Patent No. 6,654,772 B1).

Crow anticipated independent claims 1, 58, 66, 74, by the following:

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**As per claim 1**, Crow teaches a computer readable medium containing a file for storing a root storage (Fig. 5, root directory, col. 3, line 49 to col. 4, line 12) including a model directory storage (Fig. 5, directory 61, 62) comprising at least one model storage, wherein said at least one model storage comprises a model header (i.e. header in block 61 and Directory header in block 62, col. 3, line 49 to col. 4, line 12).

**As per claim 2**, Crow teaches said at least one model storage (i.e. the file system structure in Fig. 5, and data blocks in Figs 5, 8A and 8B) further comprises at least one element list storage (i.e. inodes 63, 64, 4, 5, 3, Fig. 5) including at least one element chunk stream (i.e. blocks 80, 84, 92 in Fig. 5), wherein said at least one element chunk stream comprises an element chunk header (header in inode 63 in Fig. 5) and at least one element (i.e. inode format, Previous inode, Times stamps, Fig. 11) associated with said element chunk header (col. 3, line 49 to col. 4, line 12, Fig. 5).

**As to claims 58, 66, 74**, Crow teaches a computer readable medium containing a file for storing an element list storage (i.e. directory 61, 62, Fig. 5) including at least one element chunk stream (i.e. inode, col. 3, line 49 to col. 4, line 12, Fig. 5), wherein said at least one element chunk stream comprises an element chunk header (i.e. header in each inode, see Fig. 5) for storing information about the at least one element chunk (i.e. LV1, length 3, flag, col. 4, lines 4-63) and at least one variable sized element (i.e. length 3) associated with said element chunk header (col. 4, lines 4-63).

**As to claims 60, 68, 76,** Crow teaches said element list is a control element list (col. 4, lines 4-63).

**As to claims 62, 70, 78,** Crow teaches element list is a global control element list (col. 4, lines 4-63).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3-5, 7, 15, 18, 27-29, 38-39, 43-44, 48-49, 53, 56-57, 59, 61, 67, 69, 75, 77, 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983).

**As per claim 3**, Crow teaches a computer readable medium containing a file for storing a root storage (i.e. root directory in Fig. 5, col. 3, lines 49-57) including a model directory storage (directory 61, 62, Fig. 5) comprising a plurality of model storages (col. 3, line 49 to col. 4, line 12) wherein each of said plurality of model storages is for grouping related elements (i.e. inodes, Fig. 5), is identifiable by a unique identifier (i.e. inode 63, inode 64), and comprises a model header stream (i.e. headers in Fig. 5), a control element list storage (i.e. extent 1, extent 2, Fig. 5, col. 4, lines 4-12) containing at least one element chunk stream (i.e. Block 80, Fig. 5), wherein each said element chunk stream comprises an element chunk header (i.e. LV 1, length 3, flag in Fig. 5, col. 4, lines 4-63) and at least one variable sized element (i.e. length 3, Fig. 5, col. 4, lines 4-63) associated with its respective element chunk header.

Crow does not explicitly teach a graphic element list storage containing at least one element chunk stream, but Atkinson teaches a graphic element list storage (i.e. graph object, Fig. 1) containing at least one element chunk stream (i.e. XY Data, Fig. 1, col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having a graphic element list storage containing at least one element chunk stream would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file.

**As to claims 15, 28,** Crow teaches a computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising: means for enabling a computing unit to store a root storage comprising a model directory in a storage area (col. 3, line 49 to col. 4, line 12, Fig. 5),

means for enabling said computing unit to store at least one model in said model directory, wherein said at least one model storage comprises a control element list storage having element chunks streams containing control elements (col. 4, lines 4-63),

Crow does not explicitly teach a graphic element list storage having element chunks streams containing graphic elements, but Atkinson teaches a graphic element list storage (i.e. graph object, Fig. 1) containing at least one element chunk stream (i.e. XY Data, Fig. 1, col. 4, line 26 to col. 5, line 35).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having a graphic element list storage having element chunks streams containing graphic elements would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file.

**As per claim 39,** Crow teaches a computer program product comprising a computer readable medium having computer program logic, the computer, program logic comprising: means for enabling a computer system to store at least one root storage in a storage area (col. 3, line 49 to col. 4, line 12, Fig. 5);

means for enabling said computer system to store at least one model directory storage in said at least one root storage (col. 3, line 49 to col. 4, line 12, Fig. 5);

means for enabling said computer system to store at least one model storage in said model directory storage (col. 3, line 49 to col. 4, line 63, Fig. 5);

means for enabling said computer system to store in said at least one model storage a control element list storage having element chunk streams containing variable sized control elements (col. 4, lines 4-63);

means for enabling said computer system to assign a preselected number of elements to each said element chunk stream (col. 4, lines 4-63, col. 6, lines 9-39);

means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said control element list storage col. 35, lines 1-22, col. 36, lines 25-59, Fig. 17.

Crow does not explicitly teach means for enabling said computer system to store in said at least one model storage a graphic element list storage having element chunk streams containing variable sized graphic elements, and means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said graphic element list storage, but Atkinson teaches these limitations at col. 4, lines 26-39, Fig. 1).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of means for enabling said computer system to store in said at least one model storage a graphic element list storage having element chunk streams containing variable sized graphic elements; and means for enabling said computer system to allocate each of said



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preselected number of elements to an element chunk stream in one of said graphic element list storage would have allowed Crow's users to obtain an object that has multiple streams and is conceptually stored in a storage instance and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As to claims 4, 29, Crow teaches said root storage further comprises a control model storage containing a control model header, a global control element list storage, wherein said global control element list storage contains element chunk streams including global elements (col. 2, lines 31-44).

Crow does not explicitly teach a global graphic element list storage, wherein said global graphic element list storage contains element chunk stream including global elements, but Atkinson teaches these limitations at col. 4, line 26 to col. 5, line 35, Fig. 1).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of a control model storage containing a global graphic element list storage, wherein said global graphic element list storage contains element chunk stream including global elements would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object

hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

**As per claim 5**, Crow teaches said global elements contain information relevant for all models in said model directory storage (col. 2, lines 31-44, col. 3, lines 13-35).

**As to claims 7, 27, 38, 56**, Crow teaches said root storage further comprises at least one of a stream or a storage, which are not contained in said model directory (col. 3, line 49 to col. 4, line 63).

**As per claim 18**, Crow teaches means for enabling the computing unit to store a control model in said root storage (i.e. Fig. 5, col. 3, line 49 to col. 4, line 12), wherein said control model storage includes a global control element list storage (i.e. inode, Fig. 5, col. 3, line 49 to col. 4, line 12), and said global control element list storage contains at least one global element chunk stream having at least one global control element (Fig. 5, col. 3, line 49 to col. 4, line 63).

Crow does not explicitly teach the following limitations. However, Atkinson teaches said control model storage includes a global graphic element list storage (i.e. graph object, Fig. 1, col. 4, lines 26-39), wherein said global graphic element list storage contains at least one global element chunk stream (i.e. XY data, Fig. 1, col. 4, lines 26-39) having at least one global graphic element (i.e. Title data, Fig. 1, col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion

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of having said control model storage includes a global graphic element list storage, wherein said global graphic element list storage contains at least one global element chunk stream having at least one global graphic element would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance, and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

**As to claims 43, 48,** Crow teaches said preselected number is a maximum number (col. 6, lines 9-59).

**As per claim 44,** Crow teaches means for enabling said computer system to create an additional element chunk when the number of elements exceeds said preselected number of elements assigned to each element chunk (col. 6, lines 19-59);

means for enabling said computer system to assign a preselected number of elements to said additional element chunk (col. 6, lines 19-59);

means for enabling said computer system to store new elements in said additional element chunk (col. 6, lines 19-59).

**As per claim 49,** Crow teaches means for enabling said computer system to associate a header with said at least one root storage (col. 3, line 49 to col. 4, line 63).

**As per claim 53**, Crow teaches said storage area is a file (col. 3, lines 36-57).

**As per claim 57**, Crow teaches means for enabling said computer system to store a control model in each root storage (col. 3, line 39 to col. 4, line 12).

Crow does not explicitly teach the following limitations. However, Atkinson teaches means for enabling said computer system to store a graphic element list and a control element list in each control model (col. 4, lines 26-39).

means for enabling said computer system to allocate elements to element chunks in said control element list and said graphic element list (col. 4, lines 26-39).

means for enabling said computer system to compress each element chunk to be stored in said graphic element list or said control model list in said control model directory (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow with the teachings of Atkinson to include all the claimed limitations hereinabove because Atkinson's suggestion of enabling said computer system to store a graphic element list and a control element list in each control model; enabling said computer system to allocate elements to element chunks in said control element list and said graphic element list; enabling said computer system to compress each element chunk to be stored in said graphic element list or said control model list in said control model directory would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance, and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single

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file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

**As to claims 59, 67, 75,** Crow does not specifically teach said element list is a graphic element list, but Atkinson teaches this limitation at (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having said element list is a graphic element list would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

**As to claims 61, 69, 77,** Crow does not specifically teach said element list is a global graphic element list, but Atkinson teaches this limitation at (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having said element list is a global graphic element list would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

**As per claim 82,** Crow teaches the element chunks have unique names (i.e. inode 63, inode 64) within element lists (col. 3, line 49 to col. 4, line 12, Fig. 5).

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8. Claims 8-9, 14, 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of Wolff et al. (US Patent No. 6,076,105).

**As to claims 8, 19, 31,** Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include at least one element chunk in said graphic element list is compressed in order to reduce in size of data to save space or transmission time.

**As to claims 9, 20, 32,** Crow, Atkinson do not expressly teach at least one element chunk in said control element list is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include at least one element chunk in said control element list is compressed in order to reduce in size of data to save space or transmission time.

**As to claims 14, 25, 37, 54,** Crow does not explicitly teach said root storage is adapted to be operable with a computer aided design program. However, Wolff teaches this limitation at col. 29, lines 21-43.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include said root storage is adapted to be operable with a computer aided design program in order to allow users (i.e. architects, engineers, drafters, artists, and others) to efficiently create precision drawing or technical illustrations (i.e. create two-dimensional (2-D) drawings or three-dimensional (3-D) models).

**As per claim 40**, Crow, Atkinson do not specifically teach the following limitations. However, Wolff teaches:

means for enabling said computer system to compress each element chunk (col. 29, lines 21-43);

means for enabling said computer system to store at least one compressed element chunk in at least one of the graphic element list and control element list (col. 29, lines 21-43).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include the hereinabove claimed limitations in order to reduce in size of data to save space or transmission time.

**As per claim 45**, Crow, Atkinson do not specifically teach means for enabling said computer system to compress each additional element chunk; means for enabling said computer system to store at least one additional compressed element chunk in at

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least one of said graphic element list and said control element list. However, Wolff teaches these limitations at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include these claimed limitations in order to reduce in size of data to save space or transmission time.

9. Claims 6, 10-11, 16-17, 21-22, 26, 30, 33-34, 41, 46, 50-52, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of Bolosky et al. (US Pub. No. 2002/0194484 A1).

**As to claims 6, 26, 30, 55**, Crow teaches said root storage further comprises at least one of a first stream containing a header (col. 3, line 49 to col. 4, line 63), a second stream containing session information (col. 3, line 49 to col. 4, line 63), a fourth stream containing file properties (col. 3, line 49 to col. 4, line 63).

Crow, Atkinson do not expressly teach a third stream containing a manifest. However, Bolosky teaches this limitation at [0165], Figs. 12, 13.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references because Bolosky's suggestion of a signed list of hash values which is known as a manifest would have allowed Crow's users to perform a single signature computation in order to authenticate the writes to multiple files, rather than having to compute a separate signature for each file.



**As to claims 10, 21, 33,** Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said graphic element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

**As to claims 11, 22, 34,** Crow, Atkinson do not expressly teach at least one element chunk in said control element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said control element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

**As per claim 16,** Crow, Atkinson do not explicitly teach said storage area is a memory unit in a network. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include storage area is a memory unit in a network in order to facilitate management of and access to files stored remotely at the storage server over a network.

**As per claim 17**, Crow teaches said storage area is a memory unit in a workstation (col. 3, lines 13-35).

**As per claim 41**, Crow, Atkinson does not explicitly teach means for enabling said computer system to encrypt each element chunk; and means for enabling said computer system to store at least one encrypted element chunk in at least one of the graphic element list and control element list. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitations in order to prevent unauthorized users from reading data stored on the devices.

**As per claim 46**, Crow, Atkinson do not explicitly teach means for enabling said computer system to encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted element chunk in at least one of said graphic element list and said control element list. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitations in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

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**As per claim 50**, Crow, Atkinson do not explicitly teach said computer system is the Internet. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include said computer system is the Internet in order to facilitate management of and access to files stored remotely at the storage server over a network.

**As per claim 51**, Crow, Atkinson do not specifically teach said computer system is an Intranet. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include said computer system is an Intranet because it would help large enterprises allow users within their intranet to access the public Internet through firewall servers that have the ability to screen messages in both directions so that company security is maintained.

**As per claim 52**, Crow, Atkinson do not explicitly teach said computer system is a local area network. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include said computer system is a local area network in order to facilitate management of and access to files stored remotely at the storage server over a network.

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10. Claims 12-13, 23-24, 35-36, 42, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of in view of Wolff et al. (US Patent No. 6,076,105), and Bolosky et al. (US Pub. No. US 2002/0194209 A1).

**As to claims 12, 23, 35,** Crow, Atkinson do not specifically teach at least one element chunk in said control element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said control element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow, Atkinson and Bolosky do not explicitly teach at least one element chunk in said control element list is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include at least one element chunk in said control element list is compressed in order to reduce in size of data to save space or transmission time.

**As to claims 13, 24, 36,** Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said graphic element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow, Atkinson and Bolosky do not explicitly teach at least one element chunk in said graphic element list is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson and Bolosky with the teachings of Wolff to include at least one element chunk in said graphic element list is compressed in order to reduce in size of data to save space or transmission time.

**As per claim 42,** Crow, Atkinson do not specifically teach means for enabling said computer system to compress and encrypt each element chunk; and means for enabling said computer system to store at least one encrypted and compressed element chunk in at least one of the graphic element list and the control element list.

However, Bolosky teaches means for enabling said computer system to encrypt each element chunk; and means for enabling said computer system to store at least one encrypted element chunk in at least one of the graphic element list and the control element list at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitation in order to allow a user to quickly access a

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file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

Crow, Atkinson and Bolosky do not expressly teach each element chunk is compressed, but Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include each element chunk is compressed in order to reduce in size of data to save space or transmission time.

**As per claim 47**, Crow, Atkinson do not specifically teach means for enabling said computer system to compress and encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted and compressed element chunk in at least one of said graphic element list and said control element list. However, Bolosky teaches means for enabling said computer system to encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted element chunk in at least one of the graphic element list and the control element list at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitation in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, all while insuring that the files are stored and access by non-authorized users.

Crow, Atkinson and Bolosky do not expressly teach each additional element chunk is compressed, but Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include each element chunk is compressed in order to reduce in size of data to save space or transmission time.

11. Claims 63-64, 71-72, 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Wolff et al. (US Patent No. 6,076,105).

**As to claims 63, 71, 79,** Crow does not specifically teach at least one element chunk is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow with the teachings of Wolff to include at least one element chunk is compressed in order to reduce in size of data to save space or transmission time.

12. Claims 64, 72, 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Bolosky et al. (US Pub. No. 2002/0194484 A1).

**As to claims 64, 72, 80,** Crow does not expressly teach said at least one element chunk is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow with the teachings of Bolosky to include said at least one element chunk is encrypted in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

13. Claims 65, 73, 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Bolosky et al. (US Pub. No. 2002/0194484 A), and further in view of Wolff et al. (US Patent No. 6,076,105).

**As to claims 65, 73, 81,** Crow does not teach said at least one element chunk is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow with the teachings of Bolosky to include said at least one element chunk is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow and Bolosky do not explicitly teach said at least one element chunk is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Bolosky with the teachings of Wolff to include said at least one element chunk is compressed in order to reduce in size of data to save space or transmission time.



*Response to Arguments*

14. Applicant argues that:

(a) Crow does not teach/suggest claim 1.

(b) Crow does not teach/suggest claim 2 limitation.

The Examiner respectfully disagrees for the following reasons:

Per (a), Applicant's arguments have been fully considered but they are not persuasive. The Examiner has thoroughly reviewed Applicants' arguments but firmly believes that the cited reference reasonably and properly meet the claimed limitation. Applicants are reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claimed as explained below. The Examiner is not limited to Applicants' definition which is not specifically set forth in the claims. In re Tanaka et al., 193 USPQ 139, (CCPA) 1977.

In contrast to Applicant's argument that Crow describes the logical layout of a physical disk, and does not relate to a file (Remarks, page 16, lines 14-15, it is noted that the Crow reference relates to file systems, more specifically, the Crow invention is directed to a method for storing data files, and providing a distributed storage system (Fig. 4, col. 2, lines 20-21), which is in accordance with the present invention – computer readable medium for storing large data files. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.

Further, even if the claimed invention seems to be different from the Crow, claim 1 as drafted, is broad enough to be met by the prior art. For example, as described in the

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present specification, a storage can be analogous to a file system “directory”, it has an identifier such as a name and can contain stream or other storage, and the starting point for reading or creating files is the root storage (page 9, lines 1-4); in addition, according to the root directory definition ([http://www.webopedia.com/TERM/R/root\\_directory.html](http://www.webopedia.com/TERM/R/root_directory.html)), root directory is the top directory in a file system. The root directory is provided by the operating system and has a special name. Similarly, Crow shows the recited root storage in Fig 5. as a root directory which is the starting point for reading or creating files.

Moreover, Crow teaches the model directory as shown in Fig. 5 (i.e. the file system structure), comprising at least one model storage (i.e. data blocks in Figs 5, 8A and 8B), wherein at least one model storage comprises a model header (Fig. 11).

The claim language is so broad in scope that Fig. 5 would clearly read on claim 1.

Per (b), Crow teaches said at least one model storage (i.e. the file system structure in Fig. 5, and data blocks in Figs 5, 8A and 8B) further comprises at least one element list storage (i.e. inodes 63, 64, 4, 5, 3 in Fig. 5) including at least one element chunk stream (i.e. blocks 80, 84, 92 in Fig. 5), wherein said at least one element chunk stream comprises an element chunk header (header in inode 63 in Fig. 5) and at least one element (i.e. inode format, Previous inode, Times stamps ... in Fig. 11) associated with said element chunk header (col. 3, line 49 to col. 4, line 12, Fig. 5, Fig. 11).

It is noted that element list storage equals to inodes 63, 64, 4, 5, 3 (Fig. 5). As shown in Fig. 5, inodes 4 corresponds to Directory name C that could be understood as storage where files are stored. For example, the directories C:\ and D:\ correspond to the storage C and D.

Also, the inode 4 as mentioned above in Fig. 5 includes a data block (i.e. chunk stream), which associated with a header (i.e. chunk header).

Furthermore, as shown in Fig. 11, the elements (i.e. inode format, Previous inode, Times stamps ...) are associated with the inode header.

Accordingly, the claimed invention as represented in the claims does not represent a patentable over the art of record.

In addition, due to a typographical error, it was an oversight on the examiner's part that claim 82 should have been properly rejected under 35 U.S.C. § 103(a). The correction, therefore, has been made in this communication, accordingly.

### *Conclusion*

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112.

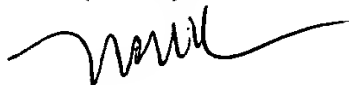
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The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere, Esq., can be reached on (571) 272-3780. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le  
December 9, 2005

